

Ecological Assessment



**InBev Brewery, Magor,
Monmouthshire – Perfect Draught Building**

8th September 2021



**Tyler
Grange**

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Summary

- S.1. In July 2021 Tyler Grange Group Ltd. was commissioned by Gerald Eve on behalf of InBev UK Ltd to carry out an ecological assessment of a parcel of land at the InBev Brewery, Magor, Monmouthshire (OS Grid Reference ST 41734 87614), hereafter referred to as the site.
- S.2. The site comprises a hardstanding yard space used for lorry storage, with areas of grassland (amenity and semi-improved) with tall ruderal vegetation. A woodland belt borders the eastern and north eastern boundaries, and a small area of this woodland extends into the site boundary. A grassland verge with areas of scrub and introduced shrub bisects the yard space.
- S.3. A planning application to re-develop the site to construct new Perfect Drought Buildings with associated storage buildings and hardstanding is to be submitted to Monmouthshire County Council.
- S.4. The site is not covered by any statutory sites designated for nature conservation importance. There are however five statutory sites and thirteen non-statutory sites within the study area. Due to the type and scale of development, there are no anticipated direct or indirect impacts to statutory or non-statutory designated sites and so no specific mitigation, or compensation is required.
- S.5. The proposals will result in the loss of habitats of negligible ecological importance as well as the loss of 12 trees and a small area woodland of up to local ecological value; however connectivity along the eastern boundary will be retained. Compensation planting (trees and hedgerows) as well as woodland management, to enhance an area of woodland within the wider InBev site, will be carried out to compensate for the loss of habitats.
- S.6. Habitats on site provide limited opportunities for protected species to be present; however, bats are likely to utilise the north eastern and eastern boundary woodland, as well as habitats being used by nesting birds and hedgehog. A strategy to mitigate adverse effects upon all relevant species including bats, birds, hedgehogs through precautionary methods of work and retention of dark corridors along the eastern boundary has been provided. The management and creation of habitat within the wider InBev site will provide additional opportunities for these species to inhabit.
- S.7. With the implementation of the strategy described, the proposed development would be in conformity with relevant policy and legislation. Providing vegetation clearance follows the advice provided within this report, legislation surrounding protected and priority species will not be triggered, as set out within **Appendix 1**.



Section 1: Introduction, Purpose and Context

Introduction

1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of InBev UK Ltd. It sets out the findings of an ecological assessment of a parcel of land within the InBev Brewery, Magor, Monmouthshire (OS Grid Reference ST 41734 87614), hereafter referred to as the 'site'.

1.2. A planning application for the proposed development will be submitted to Monmouthshire County Council for the re-development of the site for new Perfect Drought Buildings with associated storage buildings and hardstanding, identified by the red line boundary in **Figure 1.1**.

1.3. Separate planning applications have been submitted over a number of years for the expansion and re-development of the InBev Brewery. Tyler Grange has provided the Ecological input for these applications and where relevant the information detailed within these reports, including the findings of ecological surveys, have been used to inform the present assessment. This included the following reports;



Figure 1.1: Site location outlined in red (Google 2021)

- Land at InBev Brewery, Magor, Monmouthshire Ecological Assessment (February 2013) 1586_R01e;
- Proposed Keg Storage Area – InBev, Magor Ecological Assessment (September 2015) 1586 _ R11a;
- InBev Brewery, Magor, Monmouthshire - Galileo 2 Ecological Assessment (October 2015) 1586_R13a;
- InBev Brewery, Magor, Monmouthshire – Car Parking – Ecological Assessment (December 2015) – 1596_R15b;
- InBev Brewery, Magor, Monmouthshire – Warehouse 2 Extension – Ecological Assessment (October 2018) 1586_R18a; and
- InBev Brewery, Magor, Monmouthshire – Proposed Fermentation Vessels – Ecological Assessment (December 2019) 1586_R26.

Purpose

1.4. The purpose of this report is to:



- Use background data and results of field surveys, to describe and evaluate the ecological features present within the likely 'zone of influence' (Zol)¹ of the proposed development;
- Assess ecological issues and opportunities as a result of development; and
- Where appropriate, describe mitigation and enhancement proposals, together with planning controls to ensure their delivery, to ensure conformity with policy and legislation.

Site Context

- 1.5. The InBev brewery is located approximately 1 km south of the M4, in an area comprising a mosaic of scattered small settlements surrounded by farmland, including rough grassland and arable land with hedgerows and scattered trees, with a number of industrial areas. Newport is located approximately 5 km west.
- 1.6. The site is located towards the north-east of the wider InBev site, with an area of existing hardstanding, grassland (amenity and semi-improved), semi-mature trees and woodland belt. Existing buildings are located adjacent to the site to the south, further areas of hardstanding and buildings to the west, a small internal car park and amenity grassland to the north and the wider brewery site boundary and road to the east, see **Figure 1.1**.

¹ Defined as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities (CIEEM, 2018. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Winchester. Version 1.1 Updated September 2019)



Section 2: Methodology

Scoping

- 2.1 The scope of the ecological assessment (including the Zol of the proposed development and detailed survey work required) was determined by assessing previous ecological assessments on the wider InBev site for available records and published sources, together with an initial site survey.

Data Search

- 2.2 Given the nature of the project, and its location within the site, a full background data search was not deemed necessary, but an assessment of freely available online records and historical knowledge of the site was used, in particular reports in relation to Galileo 2 Ecological Assessment (Tyler Grange, 2015) for historical bat and reptile surveys, and Proposed Fermentation Vessels Ecological Assessment (Tyler Grange, 2019) for data search records.
- 2.3 The Multi-Agency Geographic Information for the Countryside (MAGIC) website was accessed for information on the location of statutory designated nature conservation sites within a 2 km radius of the site and European statutory designated sites within a 10 km radius of the site.

Extended Phase I Habitat Survey

- 2.4 An 'extended' Phase I habitat survey was undertaken on the 4th August 2021 by Sara Curtis, an experienced field ecologist and member of the Chartered Institute of Ecology and Environmental Management (CIEEM), and Lucy Mason. The technique was based upon Phase I survey methodology (JNCC, 2010). This 'extended' Phase I technique provides an inventory of the habitat types present and dominant species.
- 2.5 The weather conditions for the survey were dry and sunny, with 5% cloud cover, with a temperature of 22°C.
- 2.6 Additionally, any incidental records of fauna were also made during the survey and the habitats identified were evaluated for their potential to support legally protected species and other species of conservation concern, including priority species.
- 2.7 The above scope of work has informed the description and assessment of importance of ecological features - in line with CIEEM guidelines (CIEEM, 2018), the consideration of opportunities and constraints to development, and mitigation and enhancement requirements to ensure conformity with legislation and policy (see **Appendix 1**).
- 2.8 The level of importance of ecological features has been considered within a defined geographic context, based on the following frame of reference, international, national, regional, county, and local.

Limitations

- 2.9 It is considered that there were no limitations to the assessment of ecological impacts and proposed mitigation and enhancement strategy.



- 2.10 For confidentiality reasons, photographs were not allowed to be taken of all features identified on site.

Quality Control

- 2.11 This report has been through a two-stage technical review process, with the final sign off being undertaken by an Associate or Full member of CIEEM. All ecologists at Tyler Grange Group Ltd are members of CIEEM or are working towards membership and act under the direction of members and abide by the Institute's Code of Professional Conduct.



Section 3: Ecological Features

3.1 Set out below are the results of the online background data search and ecological survey on the site.

Protected Sites

Statutory Sites

3.2 According to MAGIC, the site is not covered by any statutory designated for nature conservation importance. There are five statutory sites within the study area which are described below in **Table 3.1**

Table 3.1: Statutorily designated sites within the study area

Site Name	Designation	Distance and direction from site	Description/Summary of reason for designation
Severn Estuary	RAMSAR, Special Protection Area (SPA), Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI)	3.8 km south east	Designated as a tidal estuary with range of habitats that supports internationally important numbers of over-wintering birds and large volumes of waterfowl, migrating fish and flora.
Gwent Levels - Redwick and Llandevenny	SSSI	0.6 km south	Designated for its extensive area of reclaimed wet pastures with a rich species diversity and communities, including nationally rare or notable aquatic invertebrate fauna, terrestrial invertebrates and rare plant species interest.
Magor Marsh	SSSI	1.0 km south	Designated as the largest remnant of the formerly extensive fenlands, supporting a variety of aquatic flora and an important breeding ground for water and marsh birds.
Gwent Levels - Magor and Undy	SSSI	1.3 km south	Designated for supporting forty three nationally rare and notable invertebrates and aquatic plant species interest.
Penhow Woodland	SSSI and National Nature Reserve (NNR)	1.8 km north	Designated as two areas of ancient semi-natural woodland on steep limestone slopes containing a number of pollarded trees and nationally rare and locally distributed species interest.

3.3 By virtue of their designation for resources of importance at an international level, Ramsar, SPA and SACs are of **International importance** and for resources of importance at a national level; NNR and SSSIs are of **National importance**.

Non-Statutory (Local) Sites

3.4 Non-statutory designated sites are summarised in the **Table 3.2** below. In Monmouthshire, non-statutory protected sites are termed Site of Importance for Nature Conservation (SINC). Thirteen confirmed SINCs lie within the study area (Tyler Grange, 2019).



Table 3.2: Non-statutorily designated sites within the study area

Site Name	Designation	Distance and direction from site	Description/Summary of reason for designation
Wilcrick Fort West	SINC	0.6 km west	Designated for its unimproved neutral grassland on a slope interest;
Grange road	SINC	0.8 km east	Designated for its neutral grassland, watercourse, scattered scrub and hedgerow with ancient woodland indicator species interest
Upper Grange Farm Fields	SINC	0.9 km north east	Designated for its species rich calcareous and neutral grassland interest.
Blue House Farm	SINC	1.0 km south east	Designated for its botanically interesting damp and dry grassland interest.
Upper Cottage Pond	SINC	1.0 km south west	Designated for its abundance of <i>Catabrosa aquatica</i> interest.
Barecroft Fields	SINC	1.0 km south	Designated for its Priority Habitat lowland species-rich grassland with vascular plants including <i>Thalictrum flavum</i> and <i>Cirsium dissectum</i> interest.
Land at Barecroft Common	SINC	1.0 south west	Designated for its lowland species-rich grassland and semi-improved grassland interest.
Bowkett Field	SINC	1.2 km south west	Designated for its Priority Habitat lowland species-rich marshy grassland with bird interest.
Blackwell Lane Field	SINC	1.4 km south east	Designated for its Priority Habitat of neutral and lowland species interest.
Bridewell Common Fields	SINC	1.5 km south east	Designated for its species rich grassland, floodplain pastures, mature willow and hedgerows interest.
Magor Marsh Wildlife Trust Reserve		1.6 km south east	Designated for its marsh with a range of habitats and plant communities including open water, marsh and scrub woodland interest.
Ridings Wood	SINC	1.8 km east	Designated for its ancient semi-natural woodland interest.
Breezy Bank to Rockfield Farm	SINC	1.9 km north east	Designated for its narrow strip of broadleaved woodland and scrub neighbouring unimproved grassland with scrub, tall herb communities and hedgerows interest.

3.5 SINC's are selected on the basis that they meet the criteria for local wildlife sites selection, for sites of importance at county level. They are therefore of **County importance**.

Habitats

3.6 The site supports the following habitats:

- Disturbed ground/ephemeral verge;
- Grassland (amenity);
- Grassland (poor semi-improved);
- Hardstanding and compound;
- Scattered trees;



- Scrub (scattered);
- Shrub (introduced)
- Tall ruderal vegetation; and
- Woodland (planted).



3.7 Habitats present within the site along with site photos and their ecological importance are detailed in **Table 3.3** This should be read in conjunction the habitat features plan (1586/P88).

3.8 No priority² habitats were recorded on or adjacent to the site.


² UK priority habitats and species are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006. Habitat types of priority for conservation in Wales are listed under section 7 of the Environment (Wales) Act 2016.





Table 3.3: Habitat descriptions and evaluation

Habitat	Description	Site Photographs	Ecological importance
Disturbed ground/ephemeral verge	<p>Areas of hardstanding bordering a walkway comprising disturbed ground and sparse ephemeral vegetation (Photo 1). Species present on the walkway include dandelion <i>Taraxacum sp.</i>, nettle <i>Urtica dioica</i>, ribwort plantain <i>Plantago lanceolata</i>, common mouse-ear <i>Cerastium fontanum</i>, willowherb <i>Chamaenerion angustifolium</i> and scarlet pimpernel <i>Anagallis arvensis</i>.</p> <p>This habitat is sparse and consists of common and widespread species.</p>	 <p>Photo 1: Ephemeral verge along hardstanding</p>	Negligible
Grassland (amenity)	<p>Small areas of improved grassland adjacent to existing internal road and car parking, and at the base of the grassland mounds are present in the north east and west of the site (Photo 2). The grassland was well managed, with short sward of c.2 cm and is dominated by perennial rye grass <i>Lolium perenne</i> and common bent <i>Agrostis capillaris</i> with clover <i>Trifolium sp.</i>, daisy <i>Bellis perennis</i> creeping buttercup <i>Ranunculus repens</i> and ground ivy <i>Glechoma hederacea</i> also present.</p> <p>This habitat is well managed and considered common and widespread throughout the wider site.</p>	 <p>Photo 2: Improved grassland area.</p>	Negligible



<p>Grassland (poor semi-improved)</p>	<p>There are two grassland mounds in the north of the site that comprise poor semi-improved grassland with tall ruderal vegetation (Photo 3). The grassland is dominated by Yorkshire fog <i>Holcus lanatus</i> and cocksfoot <i>Dactylis glomerata</i> with pendulous sedge <i>Carex pendula</i>, <i>Poa sp.</i> and crested dogs tail <i>Cynosurus cristatus</i> also present and forb species such as selfheal <i>Prunella vulgaris</i>, yarrow <i>Achillea millefolium</i>, ribwort plantain, vetch <i>Vicia sativa</i> and birds foot trefoil <i>Lotus corniculatus</i>. Tall ruderal vegetation is also scattered throughout the grassland areas, see below.</p> <p>The mounds are newly established habitats following the ceasing of management of the area. The sward was uneven and cut to a maximum height of c. 50 cm.</p> <p>A small isolated unmanaged area of grassland in the yard space (Photo 5) is also present, with the same species present as above with additional false oat grass <i>Arrhenatherum elatius</i>, meadow buttercup <i>Ranunculus acris</i>, teasel <i>Dipsacus fullonum</i>, herb Robert <i>Geranium robertianum</i> and common fleabane <i>Pulicaria dysenterica</i>.</p> <p>The poor-semi-improved grassland habitat is common and widespread in the local landscape.</p>	 <p>Photo 3: Poor semi-improved grassland mound</p>	<p>Negligible</p>
<p>Hardstanding and compound</p>	<p>The site is dominated by hardstanding, consisting of an internal service road with associated pedestrian walkways and a heavy goods vehicle storage yard. In the north of the site there is an industrial compound and walkways/roads. In the south of the site, the hardstanding is split over two levels with a retaining wall.</p>	<p>No photograph.</p>	<p>None</p>



<p>Scattered trees</p>	<p>12 scattered mature broadleaved trees are also present in the west of the site, comprising oak <i>Quercus robur</i> and tulip trees <i>Liriodendron tulipifera</i> (Photo 4). One of these trees was evaluated as having low bat roost potential, whilst the remaining trees were evaluated as having negligible bat roosting potential.</p>	 <p>Photo 4: Scattered mature trees in south west corner of site.</p>	<p>Up to Local</p>
<p>Scrub (scattered)</p>	<p>A small area of scrub is present in the unmanaged strip of vegetation that bisects the yard space. The area is approximately 3 m in width and is dominated by bramble <i>Rubus fruticosus</i>, with ash <i>Fraxinus excelsior</i> saplings also present. (Photo 6)</p> <p>This habitat is small and isolated from other areas of similar habitats. Bramble dominated scrub is considered common and widespread.</p>	 <p>Photo 5: Poor semi-improved grassland strip and area of scrub in hardstanding</p>	<p>Negligible</p>




<p>Shrub (introduced)</p>	<p>In the south of the site, introduced shrubs are located on the raised section of hardstanding approximately 1.8 m high and connects to the strip of scrub and grassland that bisects the yard space below (Photo 7). Species present include privet <i>Ligustrum ovalifolium</i>, foxglove <i>Digitalis purpurea</i>, bramble, laurel <i>Prunus laurocerasus</i> young maple <i>Acer campestre</i> and ornamental species, with limited ground flora.</p> <p>This habitat is roughly managed, isolated from other areas of similar habitats and considered common and widespread.</p>		<p>Negligible</p>
<p>Tall ruderal vegetation</p>	<p>Tall ruderal vegetation is found throughout the grassland areas, with dense areas in the east of the mound adjacent to the tree belt (Photo 7). The site is dominated by creeping thistle <i>Cirsium arvense</i>, common nettle, creeping buttercup and ragwort <i>Jacobaea vulgaris</i>, with frequent willowherb, common sorrel <i>Rumex acetosa</i>, broad-leaved dock <i>Rumex obtusifolius</i> and weld <i>Reseda luteola</i>.</p>		<p>Negligible</p>

Photo 6: Introduced shrubs along walkway

Photo 7: Dense tall ruderal vegetation on grassland mound



<p>Woodland (planted)</p>	<p>An area of woodland is present to the north-east of the site, which forms part of a planted woodland extending south east of the wider InBev site (Photo 8). The woodland in the east has native planting and is dominated by hazel <i>Corylus avellana</i>, goat willow <i>Salix caprea</i> and hawthorn <i>Crataegus monogyna</i>, with sycamore <i>Acer pseudoplatanus</i>, elder <i>Sambucus nigra</i>, maple, dogwood <i>Cornus sanguinea</i> and bramble also present. Semi-mature trees are present along the east of the woodland with coppiced hazel beneath.</p> <p>The section adjacent to the car park comprises hawthorn, elder and dogwood with more shrub and scrub species present. The woodland is cluttered with a limited scattered ground flora comprising of nettle, selfheal, willowherb, bramble and dandelion.</p> <p>This woodland is planted and as such is not considered a priority habitat.</p> <p>The section of woodland within the site boundary is connected to a wider woodland belt which acts as a wildlife corridor along the eastern boundary of the site adjacent to the A4810.</p>	 <p>Photo 8: Planted woodland belt, showing young section.</p>	<p>Woodland with introduced shrub/scrub – Negligible</p> <p>Eastern woodland - Up to Local</p>
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Protected and Priority Species

- 3.9 Habitats present on site offer limited opportunities for protected and priority species to be present. There are no ponds within 500 m of the site and whilst there are areas of semi-improved grassland, these are considered to be isolated within the current InBev site, with limited connectivity to habitats of greater suitability. Species such as great crested newt *Triturus cristatus*, dormouse *Muscardinus avellanarius*, badgers *Meles meles* and reptiles are therefore considered likely absent from the site and have not been further assessed within this report.

Badgers

- 3.10 No evidence of badger was recorded during the site visit. The semi-improved grassland and tree line habitat onsite do provide some foraging opportunities for the species, though there is abundant suitable forage in the surrounding off-site habitats. Considering the use of the site, badgers are considered likely absent, and the site is not considered integral to maintain a local population.
- 3.11 Badgers are not subject to conservation action, being a common and widespread species. As such, the site is considered to be of **negligible ecological importance**.

Bats

- 3.12 A previous data search for the InBev site conducted by Tyler Grange in 2019 (Tyler Grange, 2019) returned records of bats within 1 km of the site: including unspecified bat species, two records, closest recorded 0.6 km south-east; lesser horseshoe bat *Rhinolophus hipposideros* one record recorded 0.9 km to the east of the site; and Leisler's bat *Nyctalus leisleri*, one record recorded 0.92 km from the site.
- 3.13 A previous activity survey conducted by Tyler Grange in 2015 in an area to the south of the site recorded common pipistrelle *Pipistrellus pipistrellus*, noctule *Nyctalus noctula*, soprano pipistrelle *P. pygmaeus* and a Myotis *Myotis* sp., with low levels of foraging and commuting bat activity recorded.
- 3.14 None of the trees present within the site boundary are sufficiently mature to have developed appropriate bat roosting opportunities, such as rot holes, cracks, loose bark, etc. Except for one tree, which based on the age of the tree is of low bat roosting potential. Bat roosting potential is assessed as negligible, given the site is well lit and the features present.
- 3.15 The existing offsite building to the south of the site is well lit and subject to regular disturbance, it's construction and materials used also mean there are no suitable roosting features on the building for bats. As such, bat roosting potential is assessed as negligible.
- 3.16 Habitats within the site boundary offer limited opportunities for foraging and commuting due to lack of suitable habitats and light spill; however, the adjacent woodland belt is likely to provide greater opportunities for bats as it will provide a relatively dark corridor. Although habitats further afield are likely to provide greater opportunities for bats, the site is therefore considered to be of **no more than local ecological importance**.



Breeding Birds

- 3.17 The habitats onsite offer some minor nesting and foraging opportunities for mostly common bird species in the introduced shrubs, small scrub area, and scattered trees, whilst the adjacent woodland belt offers greater opportunities for nesting.
- 3.18 The site and wider area would be expected to support foraging birds during winter, though the site itself would not be expected to be of importance in supporting the assemblage.
- 3.19 Habitats to the east and west of the site, beyond the brewery, include arable fields, pasture and woodland and provide greater foraging opportunities. The assemblage of birds utilising site habitats is considered to be of **negligible ecological importance**.

Hedgehog

- 3.20 The poor semi-improved grassland and tree belt are considered suitable habitat for hedgehog *Erinaceus europaeus* commuting, foraging and shelter. However, it is considered that any population would not be reliant on the site alone due to the small areas of suitable habitat present.



Section 4: Impacts and Requirements for Mitigation and Enhancement

Proposed Development

- 4.1. The proposals for the site (see **Appendix 2**) include the construction of a perfect draught building, three storage units, associated hardstanding and an extension of the internal roads to allow access.
- 4.2. The proposals will result in the loss of all habitats within the red line boundary which includes all ephemeral verge, improved grassland, introduced shrub, poor semi-improved grassland, scrub, 12 scattered mature trees and a section of the woodland belt. The offsite area of woodland to the east and south east will be retained.

Impacts and Requirement for Mitigation and Enhancement

- 4.3. The impacts as a result of the development proposals are described below and reference to the relevant legislation and planning policy, as set out in **Appendix 1**.

Protected Sites

- 4.4. Given the distances involved between the site and statutory and non-statutory designated sites in the vicinity, coupled with the nature and scale of development, no adverse effects as a result of the proposed development are likely and hence no mitigation is required.

Habitats

- 4.5. The proposals will result in the loss of all habitats of negligible ecological value such as hardstanding, ephemeral verges, introduced shrub and improved grassland will not trigger planning policy and as such does not require mitigation.
- 4.6. The proposals will result in the loss of the woodland with introduced shrub and scrub of negligible ecological importance. The scattered trees and a small section of the woodland to the east of up to local ecological value, will also be lost. The majority of woodland that will be lost is hazel dominated woodland with no understorey vegetation, however there will be no fragmentation or isolation of the remaining, offsite, woodland belt.
- 4.7. During construction, damage to retained habitats, as a result of machinery use or storage of materials, could occur. In the absence of mitigation, these impacts could trigger policy S13 of the Monmouthshire Local Development Plan. Therefore to mitigate for the impacts, all retained trees will be protected by tree protection fencing, installed in line with a Tree Protection Plan (TPP), expected to be conditioned, and British Standard BS5837: 2012 'Trees in relation to design, demolition and construction'³. In addition native tree planting

³ British Standard, 2012. Trees in relation to design, demolition, and construction – Recommendations. BSI Standard Publication



- 4.8 In order to compensate for the loss the small area of woodland, an area of poorly managed woodland is present to the north of the wider InBev site (Blue hatching in **Figure 4.1**) will be enhanced through appropriate management and installation of woodland planting of native trees and understory, if required. These proposals will be incorporated into the GI Strategy, which can be controlled by an appropriately worded planning condition.
- 4.9 To mitigate for the loss of scattered trees, new native tree and native hedgerow planting will be installed within an area of well-management amenity grassland adjacent to the site (green hatching in **Figure 4.1**).

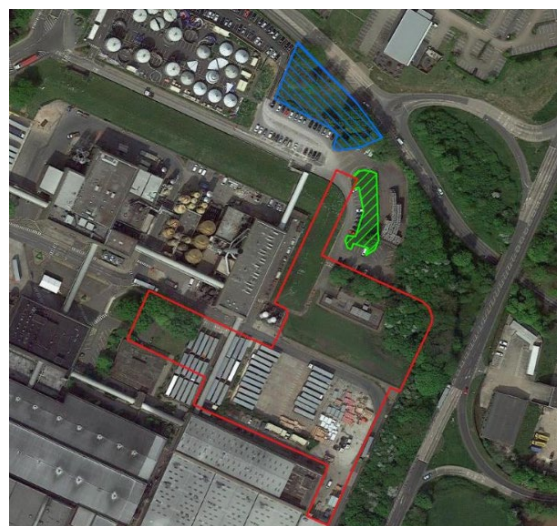


Figure 4.1: Blue hatching; area of woodland management, Green hatching; new tree and hedgerow planting.

Fauna

Badgers

- 4.10. No badger setts would be affected based on current survey data. However, the species can regularly excavate new setts. If this was to occur, and it would be disturbed during construction, then this would trigger the Protection of Badgers Act 1992.
- 4.11. Given the abundance of suitable foraging habitat in the local area, the loss of habitats on site is unlikely to affect the conservation status of the population. However, as a precautionary measure, it is recommended that a pre-commencement check for badger is carried out within 6 months of works commencing, particularly along the woodland edge. The updated badger survey will be conducted to check for the presence of any newly dug setts and should a new set be discovered during the update survey, and it is likely to be affected by the development, a mitigation strategy and licence from Natural Resource Wales will be required.
- 4.12. Protection measures during construction for badger will be detailed in the CEMP. Such measures will include briefing all contractors working on the site regarding the potential presence of badgers and any trenches or deep pits that are to be left open overnight will be capped or provided with a means of escape should a badger enter, such as a roughened plank of wood placed in the trench as a ramp to the surface. This will also avoid impacts to any other small or medium sized mammals. Protection measures covering the storage of fuel/oil/chemical and fires will also be detailed.

Bats

- 4.13. One oak tree was assessed as being of low bat roosting potential, and as such will undergo precautionary methods of work such as soft felling, over by a Suitably Qualified Ecologist (SQE). The remaining trees within the red line boundary were identified as having negligible potential to support roosting bats as the majority were of insufficient maturity leading to no formation of natural potential roost features (PRFs). The loss of trees with negligible potential to support roosting bats would not trigger the requirement for any further surveys for bats (in-line with best practice bat survey guidance).



- 4.14. Previous surveys on the site completed by Tyler Grange indicate that levels of bat activity within the wider InBev site were low and mainly by common pipistrelle and noctule (Tyler Grange, 2015). The loss of the removal of the section of woodland will not result in the fragmentation of a commuting corridor and due to the nature of the site and the species recorded, it is anticipated that bats will continue to use the site to forage and is unlikely to affect the conservation status of the local common pipistrelle or noctule population. There is a risk that those species of bat that are sensitive to lighting (namely Myotis which were also recorded on the site in previous) could be affected by an increase in ambient lighting on the site. It is therefore recommended that lighting should be designed to avoid creating additional light spill along the north and north eastern boundary of the site to retain a dark corridor. Measures to reduce light pollution may include:
- Install luminaires which use a warm-white spectrum (ideally <2700 Kelvin and with a peak wavelength higher than 550nm) to avoid the component of light most disturbing to bats; and
 - Direct light away from retained or newly planted trees in order to minimise disturbance to bats or other nocturnal species which may opportunistically use the site as a commuting route.
- 4.15. The retention of dark, unlit corridors around the north and north eastern boundary of the site will allow bats to continue to use the site.
- 4.16. New planting and woodland management will enhance the site for bat foraging post development.
- 4.17. Further enhancements would be delivered through the erection of two bat boxes (e.g. Vivara Pro WoodStone bat box) on retained trees in the south of the site.

Birds

- 4.18. The proposals will result in the loss of some minor habitat that provides opportunities for common species of nesting bird.
- 4.19. During the construction phase, there is the potential to disturb nesting birds during vegetation which would trigger the Wildlife and Countryside Act 1981, (as amended). Therefore, to avoid triggering the legislation protected nesting birds, removal of woody vegetation should be timed for outside the nesting bird season (March to August inclusive) or be preceded by a check for active nests by an ecologist. If a nest is found, a minimum of a 5 m buffer will need to be left around the nest to prevent disturbance until the chicks have fledged, as confirmed by an ecologist.
- 4.20. The habitat creation and enhancement described above will provide new and enhanced foraging and nesting habitat for birds. The site would be further enhanced through the provision of two general bird boxes (e.g. Vivara Pro Seville) on suitable retained trees within the site.

Hedgehog

The proposals result in the loss of poor semi-improved grassland with ruderal vegetation and sections of the tree belt and understory vegetation, that could provide shelter and foraging for hedgehog. During the construction phase there is risk of killing and injury of hedgehog through the removal of these habitats.



- 4.21. The removal of sections of the tree belt and understory vegetation would therefore be undertaken with care, section by section by hand to prevent the harm of any hedgehog that are utilising the site for shelter. Checks by a suitably qualified ecologist prior to removal of suitable habitat would therefore be completed. In the event a hedgehog is found during clearance, they will be carefully moved by a gloved hand out of harm's way, into the retained habitats to the north / north east.



Section 5: Conclusions

- 5.1. With the implementation of the mitigation and enhancement strategy outlined above, the proposed development would be in conformity with relevant planning policy and legislation.
- 5.2. It is not considered that the proposals will have a significant detrimental impact upon biodiversity in the long-term and providing the above is followed it is considered that the proposals will not trigger current legislation as outlined **Appendix 1**.



References

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Appendix 1: Planning Policy & Legislation

Legislation

- A1.1 Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2018;
 - The Countryside and Rights of Way (CRoW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006;
 - The Hedgerows Regulations 1997; and The Protection of Badgers Act 1992.
- A1.2 The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2018 (as amended).
- A1.3 In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4 The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

The Environment (Wales) Act 2016

- A1.5 This piece of legislation is to plan and manage Wales' natural resources. The key area that is relevant to the proposals relates to the sustainable management of the Welsh Natural Resources, the principles of which are outlined below:
- Building resilience—A resilient ecosystem is one that is healthy and functions in a way that is able to address pressures and demands placed on it and is able to deliver benefits over the long term to meet current social, economic and environmental needs.
 - Managing multiple benefits -Our ecosystems provide us with a wide range of services and benefits. We need to take all of these into account when we make decisions about how we use them , so that they provide multiple benefits for the long term. This includes taking into account their intrinsic value.



- Adaptive management -Ecosystem processes and functions are complex and variable, and our approach will be adaptive with a focus on active learning derived from monitoring and outcomes and taking into account the time lags and feedback times for ecosystems to respond to interventions. It is about 'learning by doing'.
- Long term -It is also important to take account of the short, medium and long-term consequences of actions, and consider time lags and feedback times for ecosystems to respond to any interventions.
- Evidence -This means gathering information and considering all the social, economic and environmental evidence (including evidence in respect of uncertainties) from a wide range of experts and stakeholders at the local, regional and national level as appropriate, both to identify priorities and opportunities for their management and also in delivering the management actions.
- Collaboration and co-operation -It is about having a two-way communication across local, regional, national and international levels and being interconnected between policy, process and people to break down silo ways of working. This approach supports the development and implementation of the new, innovative solutions that are needed.
- Working at the right scale -An ecosystem is a functioning unit that can operate at any scale depending on the problem or issue being addressed.

National Planning Policy

Planning Policy Wales (PPW) Edition 11

A1.6 Chapter 6 of the PPW (Distinctive and Natural Places) includes the following commitments and what they relate to where they are applicable to this site:

- 6.2: Green Infrastructure – The planning system should protect and enhance green infrastructure assets and networks because of [their] multi-functional roles. The protection and enhancement of biodiversity must be carefully considered as part of green infrastructure provision...The quality of the built environment should be enhanced by integrating green infrastructure into development.
- 6.4: Biodiversity and Ecological Networks – Promoting biodiversity by enhanced biodiversity and resilience of ecosystems duty (as set out in The Environment (Wales) Act 2016. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss and increase the resilience of ecosystems.

A1.7 Development plan strategies, policies and development proposals must consider the need to:

- Support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- Ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- Ensure statutorily and non-statutorily designated sites are properly protected and managed;



- Safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation; interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- Secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.
- Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty) – Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. In doing so planning authorities must also take account of and promote the resilience of ecosystems.
- Designated sites - Planning authorities must have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests.
- Protection and Management of Designated Sites - Statutorily designated sites must be protected from damage and deterioration, with their important features conserved and enhanced by appropriate management.
- Maintaining and Enhancing Biodiversity - Planning authorities must follow a stepwise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible.
- Protected species - The presence of a species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat and to ensure that the range and population of the species is sustained.
- Trees, woodlands and hedgerows - Planning authorities should protect trees, hedgerows, groups of trees/...woodland where they have ecological value, contribute to the character or amenity...or perform a beneficial...green infrastructure function.

Technical Advice Note 5 (TAN 5), Nature Conservation and Planning (2009)

A1.8 The purpose of Technical Advice Note (Wales) 5 (TAN5) is to supplement the information provided in PPW. This provides advice for local planning authorities on:

- The key principles of positive planning for nature conservation;
- Nature conservation and Local Development Plans;
- Nature conservation in development management procedures;
- Development affecting protected internationally and nationally designated sites and habitats; and
- Development affecting protected and priority habitats and species.



Local Planning Policy

Monmouthshire Local Development Plan

A1.9 The Monmouthshire Local Development Plan was adopted in February 2014 to replace the adopted unitary development plan 2006. Relevant policies relating to ecology and nature conservation are detailed below, but are summarised as follows:

- Policy S13 relates to the protection of the landscape, green infrastructure and the natural environment; and
- Policy C6 relates to protection of woodlands, hedgerows and trees which are important for nature.

Detailed Policy Information

Policy S13 – Landscape, Green Infrastructure and the Natural Environment

'Development proposals must:

1. Maintain the character and quality of the landscape by:
 - identifying, protecting and, where appropriate, enhancing the distinctive landscape and historical, cultural, ecological and geological heritage, including natural and man-made elements associated with existing landscape character;
 - protecting areas subject to international and national landscape designations;
 - preserving local distinctiveness, sense of place and setting;
 - respecting and conserving specific landscape features, such as hedges, trees and ponds;
 - protecting existing key landscape views and vistas.
2. Maintain, protect and enhance the integrity and connectivity of Monmouthshire's green infrastructure network.
3. Protect, positively manage and enhance biodiversity and geological interests, including designated and non-designated sites, and habitats and species of importance and the ecological connectivity between them.
4. Seek to integrate landscape elements, green infrastructure, biodiversity features and ecological connectivity features, to create multifunctional, interconnected spaces that offer opportunities for recreation and healthy activities such as walking and cycling'

Policy NE1 – Nature Conservation and Development (Protected species/habitats/flora/fauna)

A1.10 'Development proposals that would have a significant adverse effect on a locally designated site of biodiversity and / or geological importance, or a site that satisfies the relevant designation



criteria, or on the continued viability of priority habitats and species, as identified in the UK or Local Biodiversity Action Plans or Section 42 list of species and habitats of importance for conservation of biological diversity in Wales, will only be permitted where:

a) The need for the development clearly outweighs the nature conservation or geological importance of the site; and

b) It can be demonstrated that the development cannot reasonably be located elsewhere.

A1.11 Where development is permitted, it will be expected that any unavoidable harm is minimised by effective avoidance measures and mitigation. Where this is not feasible appropriate provision for compensatory habitats and features of equal or greater quality and quantity must be provided.

A1.12 Where nature conservation interests are likely to be disturbed or harmed by development proposals, applications must be accompanied by an ecological survey and assessment of the likely impact of the proposal on the species/habitats, and, where necessary, shall make appropriate provision for their safeguarding.

A1.13 Development proposals shall accord with nature conservation interests and will be expected to:

i) Retain, and where appropriate enhance, existing semi-natural habitats, linear habitat features, other features of nature conservation interest and geological features and safeguard them during construction work;

ii) Incorporate appropriate native vegetation in any landscaping or planting scheme, except where special requirements in terms of purpose or location may dictate otherwise;

iii) Ensure the protection and enhancement of wildlife and landscape resources by appropriate building design, site layouts, landscaping techniques and choice of plant species;

iv) Where appropriate, make provision for on-going maintenance of retained or created nature conservation interests'.

Policy G11 – Green Infrastructure

A1.14 'Development proposals will be expected to maintain, protect and enhance Monmouthshire's diverse green infrastructure network by:

a) Ensuring that individual green assets are retained wherever possible and integrated into new development. Where loss of green infrastructure is unavoidable in order to secure sustainable development appropriate mitigation and/or compensation of the lost assets will be required;

b) Incorporating new and /or enhanced green infrastructure of an appropriate type, standard and size. Where on-site provision of green infrastructure is not possible, contributions will be sought to make appropriate provision for green infrastructure off-site'.



Appendix 2: Proposed Plan



MAGOR EPCM

Ab InBev
 The Brewery, Magor,
 Monmouthshire NP26 3RA, UK
 Coordinate: x - Section x - Parcelle x

CLIENT	PROJECT AUTHOR	ARCHITECTURE	SIGNATURE
Ab InBev UK Luton, UK	Group - IPS Antonieta Piquero Barrantes	arquid	Begoña Soto Trujillo
AUTHOR	CONTROL	VALIDATION	APPROVED
IEC Begoña Soto Trujillo ARQUID	JJU Juan Juárez ARQUID	BSO Begoña Soto ARQUID	JGE James Gemmill Ab InBev UK

ARCHITECT
 BEGOÑA SOTO TRUJILLO

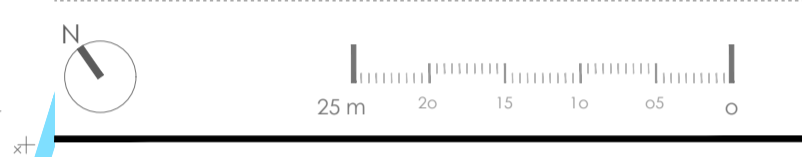
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 FOR APPROVAL

PD PLANNING APPLICATION
 PLAN Nº
01.06 REV 0

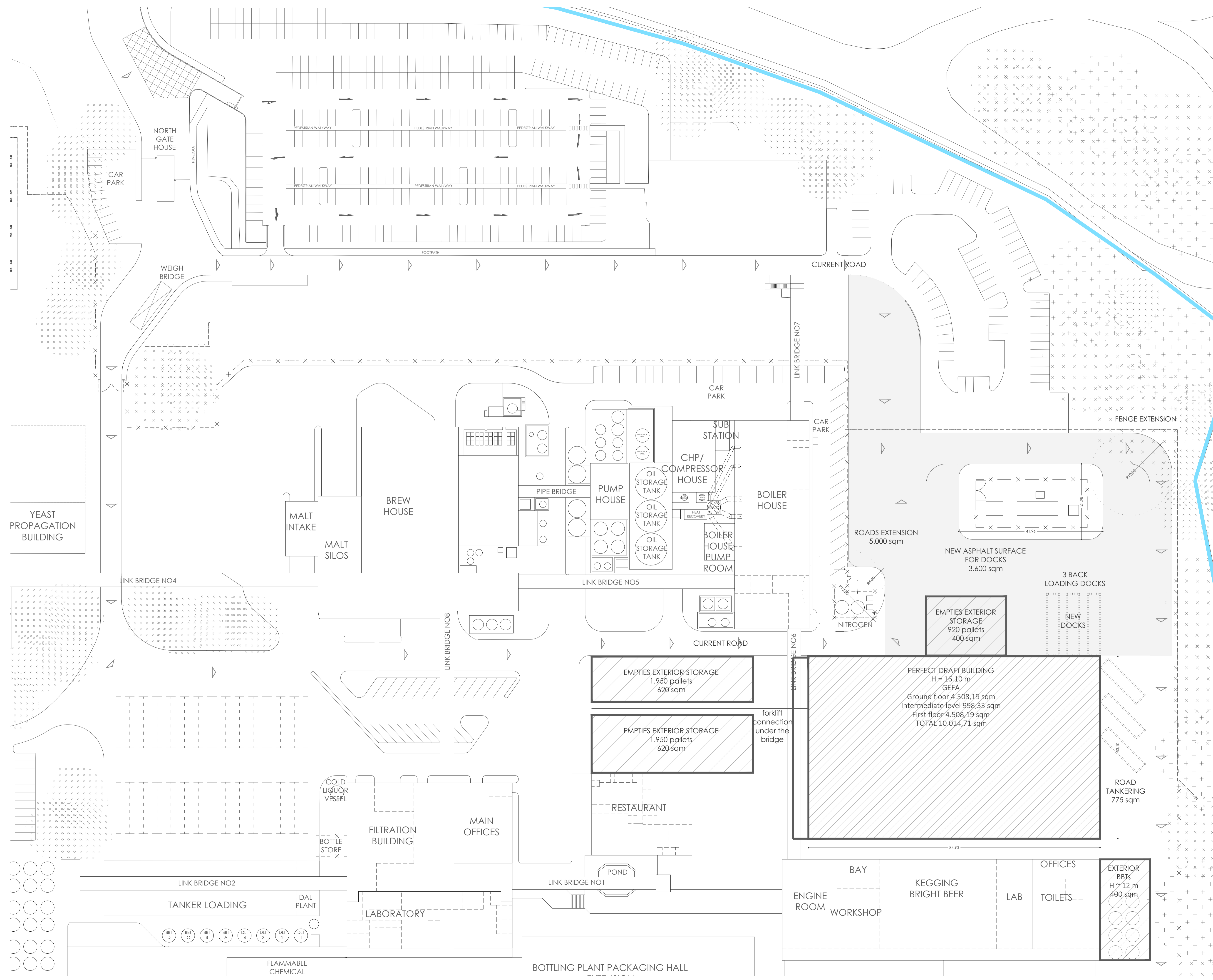
DISCIPLINE
 ARCHITECTURE
 DESCRIPTION
 PROPOSED SITE PLAN

CLIENT REFERENCE
 XXXXX

PROJECT CODE	SCALE	PAPER	SCALE	PAPER
O2082	1:500	A1	1:1000	A3



REVISION	CHANGES	DATE
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REV 1		
REV 2		
REV 3		
REV 4		
REV 5		



FLAMMABLE CHEMICAL

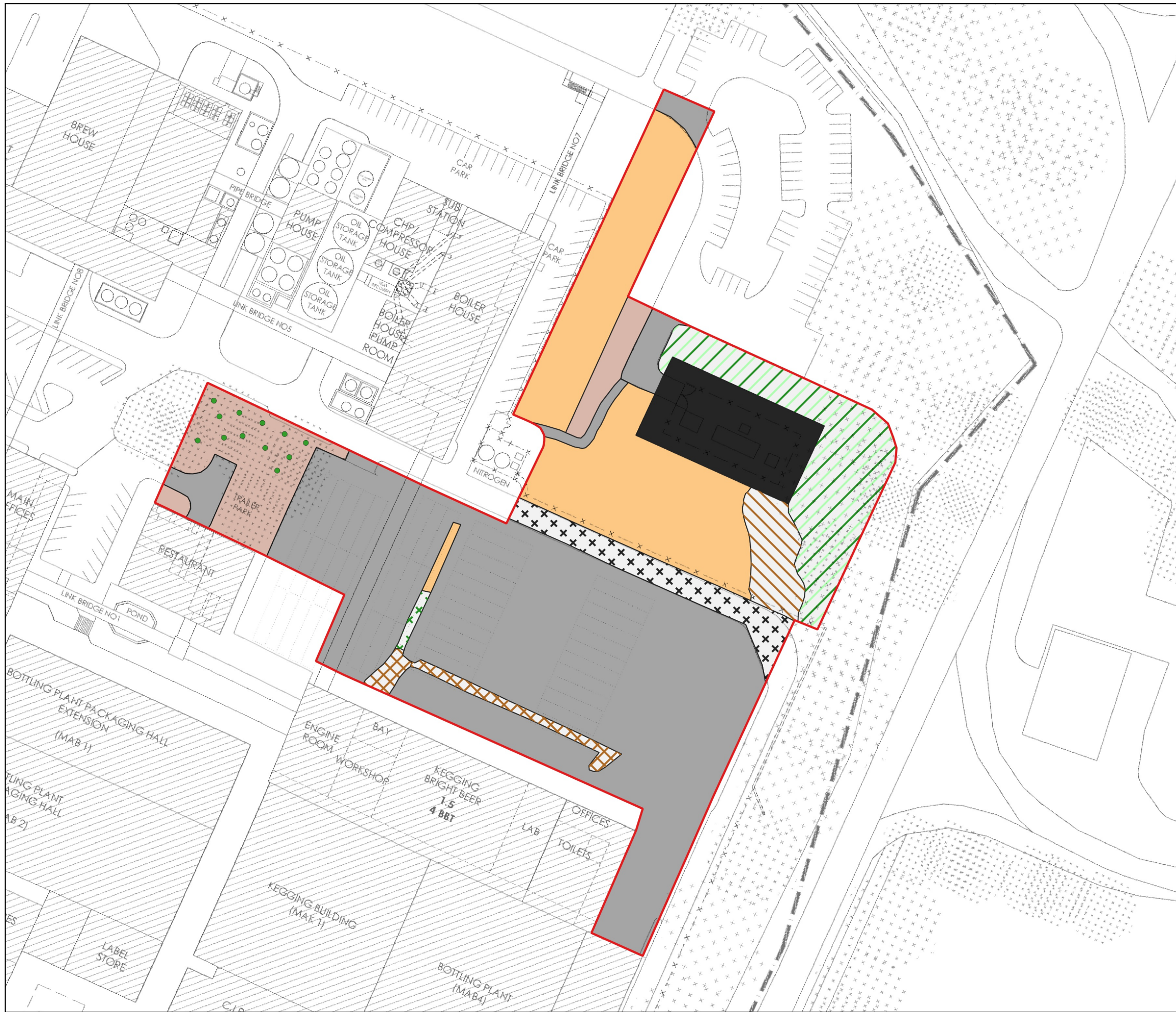
BOTTLING PLANT PACKAGING HALL

EXTERIOR BBTs
 H ~ 12 m
 400 sqm

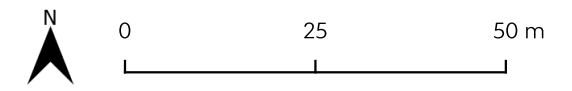
Plans:

Plan 1: Habitat Features Plan





- Site Boundary
- Compound
- Disturbed Ground (Ephemeral)
- Grassland (Amenity)
- Grassland (Poor Semi-improved)
- Hardstanding
- Scrub (Scattered)
- Shrub (Introduced)
- Tall Ruderal
- Woodland (Planted)
- Scattered Trees (Mature Broadleaved)



Project	InBev Brewery - Perfect Draught Building
Drawing Title	Habitat Features
Scale	As Shown (Approximate)
Drawing No.	1586/P88
Date	September 2021
Checked	LJM/SRC



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